ADDITIONS TO THE MARINE MOLLUSCAN FAUNA OF SOUTH EASTERN AUSTRALIA INCLUDING DESCRIPTIONS OF NEW GENUS PILLARGINELLA, SIX NEW SPECIES AND TWO SUBSPECIES.

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Introduction.

It has always been my conviction that the spasmodic and haphazard collecting so far undertaken has not exhausted the molluscan species to be found in the deeper waters of South-eastern Australia. Only two large single collections have been made; first by the vessel " Challenger " in 1874 at Station 162 off East Moncoeur Island in 38 fathoms. These collections were described in the " Challenger " reports by Rev. Boog. Watson (Gastropoda) and E. A. Smith (Pelecypoda). In the latter was included a description of a shell *Thracia watsoni* not since taken in Victoria though dredged by Mr. David Howlett off St. Francis Island, South Australia.

In 1910 the F. I. S. " Endeavour " made a number of hauls both north and south of Gabo Island and off Cape Everard. The results of this collecting can be found in the " Endeavour " reports.

T. Iredale, 1924, published the results of shore and dredging collections made by Roy Bell.

Since this time continued haphazard collecting has been carried out mostly as a hobby by trawler fishermen either for their own interest or on behalf of interested friends. Although some of this material has reached the hands of competent workers, over the years the recording of new species has probably been delayed. Also with this type of collecting the large and more spectacular shells are retained, and the smaller often rarer species discarded because of the difficulty of sorting them from the rubbish of the trawl. It is therefore with special gratitude that I express my thanks to Mr. W. S. Ayres of Lakes Entrance for taking the time and trouble to make collections from this rubbish and for placing his finds either in my hand or that of the National Museum of Victoria. Similarly to Mr. N. Buckland of Eden who over a number of years has been happy to give specimens of rare or new species to the National Museum for their records. The results of this generosity is recorded in the following pages under the species concerned.

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Iredale, T., 1924. *Proc. Linn. Soc. N.S.W.*, 49, p. 179–278, pl. XXXIII–XXXVI.
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GASTROPODA.

FISSURELLIDAE.

Notomella gabensis sp. nov.

(Plate figs. 10-12).

Shell cream coloured, large, much elevated; apex posteriorly situated, about one fourth the length of shell; anterior slope convex, posterior slope slightly curved; fissure short and narrow about 5·5 mm. from the anterior extremity; the sides of the shell are arcuate allowing the anterior and posterior ends only, to rest on a flat surface. Margins crenulated through the radial sculpture which consists of radiating ribs in two series, about forty, very prominent, standing out of the surface of shell, and the other, much smaller, each alternating with those of the larger series. Furrow well defined and crossed by numerous, somewhat irregular imbricating scales. The shell is further ornamented with numerous, fairly regular concentric ridges traversing the whole area and giving the shell a more or less latticed appearance.

Size of Holotype. Length 25 mm., breadth 18 mm., height on a plane surface 12 mm.

Radula (fig. 12) has a series of seven central cusps which diminish in width from the centre; each cusp has a slightly over-turned cutting edge. The single pair of laterals are very large, with an overturned bicuspid tip. There are a large number of fine wheat-ear-like marginals.

Locality. 50 fathoms off Gabo Island. (N. Buckland).

Reg. No. Holotype F20840 (anterior end slightly fractured).

Paratype. F.20841.

Observations: A large representative of the genus, of similar dimensions to *N. superba* (Hedley and Petterd, 1906) but readily distinguished by its greater height, narrower furrow and longer slit.

TROCHIDAE.

Clanculus leucomphalus (Verco, 1905).

1905. *Clanculus leucomphalus* Verco, Trans. roy. Soc. S. Aust., XXIX., p. 168, pl. 31, figures 9, 10, 11.

1938. *Clanculus* (*Euclanculus*) *leucomphalus* Cotton and Godfrey, Malacol. Soc. S. Aust., Publication No. I. A Systematic List of the Gastropoda . . . of South and Central Australia, p.5.

Size. Height 8 mm., diameter of base 9·75 mm.

Locality. 20 fathoms off Lakes Entrance (W. S. Ayres).

Observations: The identity of this finely granulated species was confirmed by comparison with a topotype originally received from the author.

Minolops emendata (Iredale, 1924).

1924. *Minolia pulcherrima emendata* Iredale, Proc. Linn. Soc. N.S.W., XLIX, p. 229, pl. 35, fig. 12.

1929. *Minolops emendata* Iredale, Rec. Aust. Mus., XVII, No. 4, p. 169, pl. 39, figure 5.

Size. Breadth 5 mm., height 2·5 mm.

Locality. 25 miles South-East of Lakes Entrance, 30 fathoms (W. S. Ayres).

Observations: This is the type of genus *Minolops*. In the 1929 reference the author remarked " As suggested at the time of description, this form appears to be of specific rank, five prominent keels being counted on the penultimate whorl, all of equal strength." Compared with topotypic Twofold Bay specimens received from the author.

Ethminolia probabilis (Iredale, 1924).

1908. *Monilea apicina* Hedley, (non Gould) Proc. Linn. Soc. N.S.W., XXXIII., p. 464.

1918. Hedley, (non Gould) J. roy. Soc. N.S.W., LI, (for 1917), p. M.44.

1921. *Minolia angulata* May, (non Adams) Check List Moll. Tas., p. 40.

1923. May, (non Adams) III. Index Tas. Shells, pl. 18, fig. 21.

1924. *Ethminolia probabilis* Iredale, Proc. Linn., Soc. N.S.W., XLIX, Pt. 3, p. 228, pl. 35, figures 7-9.

1955. *Ethminolia mayi* Kershaw, Proc. roy. Soc. Tas., LXXXIX., p. 291.

Size. Breadth 7·5 mm., height 4 mm.

Locality. 20 fathoms off Lakes Entrance (W. S. Ayres).

Observations: This shell, the type of *Ethminolia,* is very variable in colour, generally light brown with irregular spots and blotches. Closely-set concentric lines are visible in the adult whorls, but only with the aid of lens.

Kershaw, 1955, stated that Tasmanian shells differed from Twofold Bay shells named *probabilis* by Iredale, and he proposed the name *mayi* for the shell illustrated, and called *Minolia angulata* (Adams, 1853) by May, 1923. As it was necessary to decide which name to attach to the Victorian shells they were compared, by courtesy of the South Australian Museum, with material named *angulata* and later altered to *probabilis* by May, and with topotypic specimens of *probabilis* received from Iredale. The three lots from estuary of the Derwent River, Tasmania, Twofold Bay, N.S.W., and Lakes Entrance, Victoria are indistinguishable and therefore conspecific.

Observations: It occurs on the continental shelf of New South Wales, the type being recorded from 65–70 fathoms off Sydney.

Colpospira guilleaumei (Iredale, 1924).

1924. *Colpospira guillaumei* Iredale, Proc. Linn. Soc. N.S.W., XLIX., Pt. 3, p. 248, pl. 36, figs. 4, 15.

1925. *Colpospira guilleaumei* Iredale, Rec. Aust. Mus., XIV., No. 4, p. 267.

1955. *Platycolpus guillaumei* Iredale, Kershaw, Proc. roy. Soc. Tas., LXXXIX., p. 310.

1958. *Colpospira guillaumei* Iredale, Macpherson, May's III. Index Tas. Shells, Revision, pl. 28, fig. 11.

Size of Type: Length 15 mm., breadth 5 mm.

Locality. 45 miles East of Lakes Entrance, 50 fathoms (W. S. Ayres).

Observations: In the original description of the species the name was spelt *guillaumei* but the writer concludes it was a typographical error as it is spelt with an (e) (*guilleaumei*) in the explanation of plate and in a later paper (loc. cit.).

MATHILDIDAE.

Glyptozaria euglypta (Iredale, 1929).

1929. *Mathildona euglypta* Iredale, Rec. Aust. Mus., XVII., No. 4, p. 186, pl. 40, fig. 6.

1951. *Glyptozaria euglypta* Laseron, Rec. Aust. Mus., XII, No. 4, p. 333, fig. 85.

Size. Length 20 mm., breadth 7 mm.

Locality. 65 fathoms off Cape Everard (N. Buckland).

Observations: This is the second representative of the genus recorded from Bass Strait. The only other species of the genus is *G. opulenta* (Hedley, 1907) a narrower form of smaller proportions being 6 x 2 mm.

CERITHIDAE.

Ataxocerithium applenum (Iredale, 1936).

1936. *Ataxocerithium applenum* Iredale, Rec. Aust. Mus., XIX, No. 5, p. 291, pl. 21, fig. 19.

Size of Type. Length 14 mm., breadth 7 mm.

Locality. 20 fathoms off Lakes Entrance (W. S. Ayres).

Observations: This appears to be a frequent species all along the continental shelf of New South Wales, and is easily separable from *A. scruposum* Iredale by its much broader form: it is the type of sub-genus *Geminataxum* Iredale, 1936.

RISSOIDAE.

Lironoba archensis (May, 1912).

1912. *Rissoa archensis* May, Proc. roy. Soc. Tas., p. 47, pl. 2, fig. 5.
1921. *Linoroba archensis* May, Check List Moll. Tas., p. 49.
1923. May, III. Index Tas. Shells, pl. 23, fig. 8.
1955. Kershaw, Proc. roy. Soc. Tas., LXXXIX, p. 308.
1958. Macpherson, May's III. Index Tas. Shells, Revision, pl. 23, fig. 8.

Size of Type. Length, 2·3 mm., breadth, 1·3 mm.

Locality. 45 miles East of Lakes Entrance, 50 fathoms (W. S. Ayres).

Observations: Resembles *Rissoa lockyeri* Hedley, 1911, but its broader shape and bicarinate spire are sufficient to separate it.

RISSOINIDAE.

Rissoina lintea (Hedley and May, 1908).

1908. *Rissoina lintea* Hedley and May, Rec. Aust Mus., VII, p. 117, pl. 23, fig. 11.
1921. May, Check List Moll. Tas., p. 53.
1923. May, III. Index Tas. Shells, pl. 25, fig. 10.
1955. Kershaw, Proc. roy. Soc. Tas., LXXXIX, p. 309.
1958. Macpherson, May's III. Index Tas. Shells, Revision, pl. 25, fig. 10.

Size of Type. Length 7 mm., breadth 2·5 mm.

Locality. 18 miles East of Lakes Entrance, 5–15 fathoms (W. S. Ayres).

Observations: This record is based on a single specimen. Easily distinguished from its nearest ally *R. rhyllensis* Gatliff and Gabriel, 1908, by its channelled suture and closely-set spiral threads which are visible on all the whorls with the aid of a lens.

Stiva ferruginea (Hedley, 1904).

1904. *Stiva ferruginea* Hedley, Proc. Linn. Soc. N.S.W., XXIX., Pt. 1, p. 192, pl. 9, figures 23–25.
1918. Hedley, J. roy. Soc. N.S.W. LI., (for 1917), p. M.55.

Size. Length 18 mm., breadth 7 mm.

Locality. 65 fathoms off Cape Everard (N. Buckland).

Observations: *Stiva* Hedley, 1904; with *S. ferruginea* as the type, is a curious genus representend by two species from the Peronian province, the above locality being the first record of its existence in Victorian waters. The author's description emphasizes the *Scala*-like contours of this shell

TURRITELLIDAE.

Gazameda decoramen (Iredale, 1936).

1936. *Gazameda decoramen* Iredale, Rec. Aust. Mus., XIX., No. 5, p. 292, pl. 21, fig. 20.

Size. Length 18 mm., breadth at base 6·5 mm.

Locality. 18 miles South-East of Lakes Entrance, 5–15 fathoms (W. S. Ayres).

Ataxocerithium scruposum (Iredale, 1936).

1936. *Ataxocerithium scruposum* Iredale, Rec. Aust. Mus., XIX., No. 5, p. 291, pl. 21, fig. 18.

Size of Type. Length 12 mm., breadth 6 mm.

Locality. 20 fathoms off Lakes Entrance (W. S. Ayres).

Observations: This species, like *A. applenum* Iredale, is recorded all along the continental shelf of New South Wales. It is readily distinguished from that species by its narrower form and finer sculpture.

STILIFERIDAE.

Stilapex lactarius (Iredale, 1925).

1910. *Stilifer brazieri* Gatliff and Gabriel (non Angas, 1877) Proc. roy. Soc. Vic., XXIII., (NS.), Pt. 1, p. 91.

1921. *Stilifer brazieri* May (non Angas) Check List Moll. Tas., p. 101.

1923. May, III. Index Moll. Tas., pl. 45, fig. 24.

1925. *Stilapex lactarius* Iredale, Rec. Aust. Mus., XIV., No. 4, p. 270, pl. 43, fig. 20.

1955. *Stilifer brazieri* Kershaw (non Angas) Proc. roy. Soc. Tas., LXXXIX., p. 312.

1955. *Stilapex lactarius* Laseron, Aust. Zool., XII., p. 99, (Text fig.), (after Iredale), 78.

1958. *Stilifer brazieri,* Macpherson (non Angas), May's Illust. Index Tas. Shells Revision, pl. 45, fig. 24.

Size. Length 8 mm., breadth 5 mm.

Localities. 65 fathoms off Cape Everard (N. Buckland); Bass Strait, "Endeavour"; Shoreham, (Gatliff Coll.).

Observations: A shining white, globose species. The Victorian record of *S. brazieri* Angas, by Gatliff and Gabriel (loc. cit.) was based on a shell obtained in Bass Strait by the "Endeavour". It is apparent, on re-examination of "Endeavour" material and the present specimen that they are both of the same species as the shell figured by May, 1923, but differ from *S. brazieri* which, as pointed out by Iredale, has a much narrower shell. It seems likely that Iredale's deduction that this species is free living, is incorrect as three specimens were obtained by the "Endeavour" off a starfish in 40 fathoms, Bass Strait. The type locality of *Stilapex lactarius* is 70 fathoms, 20 miles East of Babel Island.

PYRAMIDELLIDAE.

Puposyrnola tasmanica (Tenison Woods, 1887).

1877. *Styloptygma tasmanica* T. Woods, Proc. roy. Soc. Tas. (for 1876), p. 151.
1901. *Syrnola tasmanica* Tate and May, Proc. Linn. Soc. N.S.W., XXIV., p. 382.
1921. May, Check List Moll. Tas, p. 98.
1923. May Ill., Index Tas. Shells, pl. 44, fig. 13.
1955. *Puposyrnola tasmanica* Kershaw, Proc. roy. Soc. Tas. LXXXIX., p. 312.
1958. Macpherson, May's Ill., Index Tas. Shells, Revision, pl. 44, fig. 13.

Size. Length 4 mm., breadth 1 mm.

Locality. 18 miles East of Lakes Entrance, 5–15 fathoms (W. S. Ayres).

Observations: A white, polished, elongately fusiform shell with protoconch somewhat roundish and whorls obsoletely radially striate.

Pyrgiscus varicifera (Tate, 1898).

1898. *Turbonilla varicifera* Tate, Trans. roy. Soc. S. Aust., XXII., p. 85, pl. 4, fig. 7.
1905. Hedley, Rec. Aust. Mus., VI., p. 42.
1909. *Turbonilla varicifera* Hedley, Aust., Assoc., Adv., Sci., p. 359.
1918. Hedley, J. roy. Soc. N.S.W., LI., (for 1917), p. M.99.
1951. *Pyrgiscus varicifera* Laseron, Rec. Aust. Mus., XXII., No. 4, p. 323, fig. 62.

Size. Length 15 mm., breadth 4 mm.

Localities. 15–20 fathoms West of Lakes Entrance (W. S. Ayres), 65 fathoms off Cape Everard (N. Buckland).

Observations: The species has a rather wide distribution, being recorded from South Australia through Bass Strait to Queensland, a typical specimen in the collection of the writer being obtained by a trawler off Eden.

LIPPISTIDAE.

Icuncula torcularis (Tenison Woods, 1878).

1878. *Cingulina torcularis* T. Woods, Proc. Linn. Soc. N.S.W., II., p. 263.
1899. *Rissoa torcularis* Tate, Trans. roy. Soc. S. Aust., XXIII., p. 234.
1901. *Trichotropis torcularis* Hedley, Rec. Aust. Mus., IV., No. 1, p. 22, fig. 2, (in text).
1915. *Lippistes torcularis* May, Proc. roy. Soc. Tas., p. 77.
1918. Hedley, J. roy. Soc. N.S.W. (for 1917), p. M.60.
1921. May, Check List. Moll. Tas, p. 62.
1923. May, Ill. Index Tas. Shells, XXII., pl. 28, fig. 21.
1931. *Icuncula torcularis* Cotton & Godfrey, S. Aust. Nat. XII., No. 4, p. 61, pl. 2, fig. 9.

1955. Kershaw, Proc. roy. Soc. Tas., LXXXIX., p. 313.

1958. Macpherson, May's Ill. Index Tas. Shells, Revision, pl. 28, fig. 21.

Size. Length 3·5 mm., breadth 1·5 mm.

Locality. 25 miles South-East of Lakes Entrance, 30 fathoms (W. S. Ayres).

Observations: No difficulty should be experienced in identifying this shell which is a singular species distinguished by a prominent keel on the centre of each whorl, giving it a screw-like appearance. The base bears three rounded keels. Occurs also in New South Wales.

XENOPHORIDAE.

Xenophora peroniana (Iredale, 1929).

1918. *Xenophora tatei* Hedley (non Harris), J. roy. Soc. N.S.W. (for 1917), p. M.63.

1927. *Xenophora* Sp. Allan, Aust. Mus. Mag. III., p. 57, (fig. in text).

1929. *Onustus peronianus* Iredale, Rec. Aust. Mus., XVII., No. 4, p. 172.

Size. 50 mm.

Localities. 20 fathoms off Lakes Entrance; 50 fathoms North of Deal Island (E. Paddon).

Observations: The only representative of the genus in Victoria and readily recognized, the whole surface of the shell being almost covered by extraneous objects such as pebbles and other shells. It somewhat approaches the New Zealand "Carrier" shell, but is not so tall and the obvious means of distinguishing should be the shells carried by the two forms. Recorded also from Eden, New South Wales.

NATICIDAE.

Tanea luculentus (Iredale, 1929).

1929. *Natica luculenta* Iredale, Rec. Aust. Mus., XVII., No. 4, p. 179, pl. 40, fig. 10.

1956. *Notocochlis luculentus* Woolacott, Proc. roy. Zool. Soc. N.S.W., for 1954–55, p. 75, fig. 2 (operculum) fig. 5 (shell).

Size. Height 24 mm., breadth 21·5 mm.

Localities. 18 miles East of Lakes Entrance, 5–15 fathoms (W. S. Ayres).

Observations: A very globose, cream-coloured shell regularly spotted with splashes of brown. The single specimen obtained was identified by comparison with specimens from off Eden, New South Wales. Woolacott, 1955, placed this species in *Notocochlis* but stated that the operculum has two marginal grooves, a feature which immediately places it in *Tanea* Marwick, 1931.

Polinices (Conuber) ayresi sp. nov.

Plate 1. Figs. 8-9.

Shell small, thin, smooth, shining; conoid-globose; whorls 4½ rapidly increasing; colour whitish with a narrow fawn-coloured subsutural band and a much wider peripheral band occupying about half of the body-whorl. Aperture semi-circular, outer lip somewhat sharp, columella slightly arcuate; umbilicus small covered by a pad which almost fills the umbilical region. Operculum horny, semilunate, slightly smaller than the aperture.

Size of type: Height 6·25 mm. breadth 7·3 mm.

Radula (fig. 9) with a tricuspid central tooth on a wide base with paired tentaculiform backward facing lateral projections; lateral teeth simple, in three rows.

Locality: 18 miles East of Lakes Entrance, 5–15 fathoms (W. S. Ayres).

Reg. No. Holotype shell & radula F. 20828. Paratype shell & radula F. 20829.

Observations: A distinctive shell. The fawn-coloured peripheral band which is also clearly visible from within, provides a useful recognition mark. This feature and its more exsert spire immediately separates it from any of the small Peronian species.

Named in honour of Mr. W. S. Ayres the discoverer.

CASSIDAE.

Xenogalea nivea (Brazier, 1872).

1872. *Cassis nivea* Brazier, Proc. zool. Soc. Lond., p. 616, pl. 44, fig. 1.
1900. Pritchard and Gatliff, Proc. roy Soc. Vict. XII., (New Series), p. 189, (in part).
1921. May, Check List Moll. Tas., p. 65 (in part).
1927. *Xenogalea nivea* Iredale, Rec. Aust. Mus., XV., No. 5, p. 344, pl. 32, fig. 13.
1955. Kershaw, Proc. roy. Soc. Tas., LXXXIX., p. 314.

Size. Length 51 mm., breadth 44 mm.

Locality. Portland.

Observations: This is a pure white shell, usually with a double row of tubercles at the shoulder of body-whorl, a very variable feature which at times may be almost absent. Pritchard and Gatliff and May (loc. cit.) have included it in the synonymy of *X. pyrum* (Lamarck, 1822), but I am inclined to concur with Iredale in regarding it as worthy of specific distinction. Its distribution is from Tasmania through Bass Strait to South Australia.

CYMATIIDAE.

Cabestana waterhousei frigidulum (Iredale, 1929).

1929. *Cymatium waterhousei frigidulum* Iredale, Rec. Aust. Mus., XVII., No. 4, p. 177, pl. 41, fig. 2.

Size. Length 75 mm., breadth 35 mm.

Locality. Eastern Victoria (T. Worcester).

Observations: The figure depicts a much narrower shell than *C. waterhousei* (Adams & Angas, 1864). The colour is given by the author as pale straw; otherwise there is little difference between the two forms.

Cymatiella peroniana (Iredale, 1929).

1929. *Cymatiella peroniana* Iredale, Rec. Aust. Mus., XVII., No. 4, p. 176, pl. 40, fig. 9.

Size of Type. Length 16 mm., breadth 7·25 mm.

Locality. 20 fathoms off Lakes Entrance (W. S. Ayres).

Observations: In size and shape resembling *C. gaimardi* Iredale, 1929, but with a long canal and more open mouth. Previously recorded from New South Wales off Montague Island, 50–60 fathoms.

TONNIDAE.

Tonna cerevisina (Hedley, 1919).

1849. *Dolium variegatum* Reeve (non Lamarck) Conch. Icon., V., pl. 5, fig. 7a.
1867. Angas (non Lamarck) Proc. zool. Soc. Lond., p. 197.
1885. Tyron (non Lamarck) Manual Conch., VII., p. 262, pl. 3, figs. 13, 14.
1903. Hedley (non Lamarck), Mem. Aust. Mus., IV., p. 341.
1907. *Tonna variegata* Hedley (non Lamarck) Proc. Linn. Soc. N.S.W., XXXII., pt. 3, p. 483.
1919. *Tonna cerevisina* Hedley, Rec. Aust. Mus., XII., No. 11, p. 330, pls. 39–41, figures 1–3.

Size. Length 240 mm., major diam. 210 mm., minor 160 mm.

Localities. 3 miles off Marlo, 12 fathoms (W. S. Ayres); 6 miles off Lakes Entrance, 20 fathoms (W. S. Ayres).

Observations: This species could only be confused with the New South Wales *T. tetracotula* Hedley, 1919 from which it differs by its more globose form and in the absence of the smaller intermediate spiral ribs.

MURICIDAE.

Litozamia rudolphi (Brazier, 1894).

1894. *Peristernia rudolphi* Brazier, Proc. Linn. Soc. N.S.W., XIX., p. 166, pl. 14, figure 1.
1918. *Trophon rudolphi* Hedley, J. roy Soc. N.S.W. (for 1917), p. M.92.
1921. May, Check List Moll. Tas., p. 86.
1923. May, Ill. Index Shells Tas. pl. 40, fig. 7.
1955. *Litozamia rudolphi,* Kershaw, Proc. roy. Soc. Tas., LXXXIX., p. 315.
1958. Macpherson, May's Ill. Index Tas. Shells, Revision, pl. 40, fig. 7.

Size. Length 6·5 mm., breadth 4 mm.

Locality. On reef 6 miles South of Lakes Entrance, 20 fathoms (W. S. Ayres).

Observations: "May be known by the large dark reddish brown spots below the suture and nearly on the angle of the whorls."

Emozamia licinus (Hedley & Petterd, 1906).

1906. *Murex licinus* Hedley and Petterd, Rec. Aust. Mus., VI., Pt. 3, p. 219, pl. 37, fig. 6.
1921. *Trophon licinus* May, Check List Moll. Tas., p. 85.
1923. May, Ill. Index Tas. Shells, pl. 40, fig. 3.
1929. *Emozamia licinus* Iredale, Rec. Aust. Mus., XVII., No. 4, p. 185.
1955. Kershaw, Proc. roy. Soc. Tas., LXXXIX., p. 315.
1958. Macpherson, May's Ill. Index Tas. Shells, Revision, pl. 40, fig. 3.

Size of Type. Length 17 mm., breadth 13 mm.

Locality. Off Lakes Entrance; east of Cape Everard, 63 fathoms.

Observations: This Victorian occurrence is based on a specimen obtained by Mr. J. Walker in 1953 followed by another example collected by Mr. J. Cleasby and presented to the National Museum, Melbourne by Mr. N. Buckland. The peculiar squat form and characteristic sculpture provide ready means of identification. This is the type of genus *Emozamia*.

Ollaphon molorthus (Hedley & May, 1908).

1908. *Trophon molorthus* Hedley & May, Rec. Aust. Mus., VII., p. 122, pl. 24, fig. 23.
1921. May, Check List Moll. Tas., p. 85.
1923. May, Ill. Index Shells, Tas., pl. 40, fig. 4.
1958. *Ollaphon molorthus* Macpherson, May's Ill. Index Tas. Shells, Revision, pl. 40, fig. 4.

Size. Length 10·5 mm., breadth 4·5 mm.,

Locality. 25 miles South-East of Lakes Entrance, 30 fathoms (W. S. Ayres).

THAIDIDAE.

Dicathais vector (Thornley, 1952).

1952. *Dicathais vector* Thornley, "Marine Zoologist", Incorp. in Proc. roy. zool. Soc. N.S.W., p. 43, figs. 1a, 1b.

Size. Length 30 mm.

Locality. Off Lakes Entrance (Mrs. H. Newman).

Observations: The Victorian record is based on specimens obtained from a glass fishing float. The type with others was found on a log of Silky Oak at Hawkes Nest Beach, New South Wales.

COLUMBELLIDAE.

Dentimitrella axiaerata (Verco, 1910).

1910. *Pyrene axiaerata* Verco, Trans. roy. Soc. S. Aust., XXXIV., p. 129, pl. 29, fig. 4.
1921. May, Check List Moll. Tas., p. 83.
1923. May, Ill. Index Shells, Tas., pl. 38, fig. 21.
1955. *Zemitrella axiaerata* Kershaw, Proc. roy. Soc. Tas., LXXXIX., p. 316.
1958. *Dentimitrella axiaerata* Macpherson, May's Ill. Index Tas. Shells, Revision, pl. 38, fig. 21.

Size. Length 10·4 mm., breadth 3·7 mm.

Locality. 20 fathoms off Lakes Entrance (W. S. Ayres).

Observations: A species easily identified by the very elate spire and pinkish apex which is a fairly constant feature. The amber-coloured axial bands referred to in the original description show much variation which is evident in both Victorian and Twofold Bay examples, and from each of these localities appear specimens absolutely devoid of this ornamentation.

BUCCINIDAE.

Cominella kingicola (Tate & May, 1900).

1900. *Cantharus kingicola* Tate and May Trans. roy. Soc. S. Aust. XXIV., p. 91.
1901. *Cominella kingicola* May, Check List Moll. Tas., p. 80.
1923. May, Ill. Index Tas. Shells, pl. 38, fig. 2.
1955. Kershaw, Proc. roy. Soc. Tas., LXXXIX., p. 316.
1958. Macpherson, May's Ill. Index Tas. Shells, Revision, pl. 38, fig. 2.

Size of Type. Length 18 mm., breadth 9 mm.

Locality. Queenscliff (Taken alive, R. Burn).

Observations: A solid, whitish, fusiformly-oval shell bearing well developed longitudinal ribs which are crossed by fairly regular spiral lirae. Originally described from King Island, Bass Strait.

NASSIDAE.

Radulphus royanus (Iredale, 1924).

1924. *Radulphus royanus* Iredale, Proc. Linn. Soc. N.S.W., XLIX., Pt. 3, p. 270, pl. 34, fig. 8.

Size: Length 15 mm., breadth 7 mm.

Locality. 20 fathoms off Lakes Entrance (W. S. Ayres).

Observations: Dredged in Disaster Bay and Twofold Bay, N.S.W., 10–25 fathoms, it is the type of the genus *Radulphus*.

Reticunassa compacta (Angas, 1865).

1865. *Nassa compacta* Angas, Proc. zool. Soc. Lond., p. 154.
1887. *Nassa* (*Hima*) *tringa* Gatliff (non Souverbie, 1864) Field Nat. Club Vic., p. 2.
1898. *Nassa rufocincta* Pritchard and Gatliff (non Angas, 1851). Proc. roy. Soc. Vic., X., (N.S.), Pt. 11, p. 279.
1918. *Nassarius pauperus* Hedley (non Gould, 1850), J. roy. Soc. N.S.W., 51, (for 1917), p. M.88
1921. May, Check List Moll. Tas., p. 82.
1923. May, Ill. Index Tas. Shells, pl. 38, fig. 14.
1951. *Reticunassa paupera* Macpherson and Chapple (non Gould), Mem. Nat. Mus. Vict., XVII., p. 132.
1955. Cotton, Proc. roy. Soc. S.A., Mal. Sect.
1955. Kershaw, Proc. roy. Soc. Tas., LXXXIX., p. 317.
1958. Macpherson, May's Ill. Index Tas. Shells, Revision, pl. 38, fig. 14.

For many years this species was known as *N. rufocincta* A. Adams (loc. cit.) from Honduras; but from the description and locality it is hard to reconcile our shell as being that species and Australian Conchologists, now accept it as a mis-identification. It was recorded in the first Victorian list of Marine Mollusca by J. H. Gatliff (loc. cit.) as *Nassa* (*Hima*) *tringa* Souverbie with *compacta* Angas, 1865, and *rufocincta* A. Adams, 1867 as synonyms. Pritchard and Gatliff in their catalogue of Marine Shells of Victoria (loc. cit.) selected *rufocincta* A. Adams, 1851, as the correct appellation and included *N. tringa* Souverbie and *N. compacta* Angas in the synonymy. Hedley (loc. cit.) adopted *Nassarius pauperus* Gould for the New South Wales shells, and May (loc. cit.) used *N. tringa* Souverbie with *N. compacta* Angas and *N. rufocincta* Angas as synonyms. From the above, these Molluscs appear to be in a tangled condition, and the present writer is convinced that *rufocincta* A. Adams may be discarded as non-Australian, and that an error exists in lumping the two species *paupera* Gould and *compacta* Angas both of which appear in the Peronian region. The whorls of the former are ornamented with concentric ridges, the body-whorl possessing about ten, between which appear 8–10 microscopic concentric threads and about sixteen prominent longitudinal ribs while the latter is lacking the microscopic spiral threads.

Reticunassa compacta benthalis Subspecies Nov.

Plate Figure 1.

Shell small, rather solid, creamy with bands of darker colouration on the spire whorls, one above and one below the suture with three very distinct ones on the body-whorl, the third just below the periphery; the colour is not constant, some specimens being almost uniform white. Whorls six including a 2½ coiled protoconch. Sculpture showing well developed longitudinal ribs, about twenty

appearing on the ultimate whorl; surface further ornamented with numerous microscopic longitudinal threads over and between the radial ribs. Aperture ovate, colour bands easily discernible from within; outer lip varixed bearing numerous fine denticles near the inner edge.

Size: Length 8 mm., breadth 4 mm.

Localities. 65 fathoms off Cape Everard (type locality) (N. Buckland); off Lakes Entrance 20 fathoms (W. S. Ayres).

Reg. No. Holotype F.20838. Paratype F.20839.

Observations: This shell belongs with *compacta* but its closer radials and more numerous concentric ridges present a much finer latticed appearance worthy of subspecific distinction and *benthalis* is here proposed.

OLIVIDAE.

Belloliva brazieri (Angas, 1877).

1877. *Olivella brazieri* Angas, Proc. zool. Soc. Lond., p. 172, pl. 26, fig. 6.
1918. *Olivella leucozona brazieri* Angas, Hedley, J. roy. Soc. N.S.W., LI., (for 1917), p. M.74.
1922. *Belloliva brazieri* Angas, Peile, Proc. Malacol. Soc. Lond., XV., Pt. 1, p. 18, fig. 7 (radula).
1924. Iredale, Proc. Linn. Soc. N.S.W., XLIX., Pt. 3, p. 259.

Size. Length 12·5 mm., breadth 5 mm.

Locality. 20 fathoms off Lakes Entrance (W. S. Ayres).

Observations: Peile (loc. cit.) discusses the radula of *brazieri* when erecting his new genus *Belloliva* making this species the type. The shell is not common in Victoria but is recorded from several localities in New South Wales.

Alocospira fusiformis (Petterd, 1886).

1886. *Ancillaria fusiformis* Petterd, Proc. roy. Soc. Tas., (for 1885), p. 342.
1899. *Ancilla petterdi* Pritchard & Gatliff (non Tate), Proc. roy. Soc. Vict., XI., (New Series), p. 196.
1924. *Baryspira fusiformis,* Iredale, Proc. Linn. Soc. N.S.W., XLIX., Pt. 3, p. 261, pl. 36, fig. 10.

Size. Length 20 mm., breadth 9 mm.

Localities. Apollo Bay; dredged off Portsea, Port Phillip (Self); off Gabo Island (T. Iredale); 20 fathoms off Lakes Entrance (W. S. Ayres).

Observations: This species shows considerable variation in breadth and callus, the broader, more heavily calloused shells have been mistakenly identified in Victoria by Pritchard and Gatliff (loc. cit.) as *A. petterdi* (Tate, 1893). However, a series shows them to intergrade and two specimens of the true *petterdi* Tate in the Nat. Mus. Vic. collection confirms Iredale's 1924 recognition of it as a distinct species. With its peculiar fusiform shape and chestnut colour, no difficulty should be experienced in distinguishing the shell.

Alocospira gaza (Iredale, 1924).

1924. *Baryspira fusiformis gaza* Iredale, Proc. Linn. Soc. N.S.W., XLIX., Part 3, p. 261, pl. 36, fig. 9.

Size: Length 18·4 mm., breadth 6·7 mm.

Localities. 30 fathoms off Lakes Entrance (W. S. Ayres); off Cape Everard 65 fathoms (N. Buckland).

Observations: I agree with the author that it is an elongate form and with this feature, so consistent in the specimens before me, it is regarded as worthy of specific rank.

MITRIDAE.

Eumitra prosphora (Iredale, 1922).

1922. *Mitra solida* Peile (non Reeve), Proc. Malacol. Soc. Lond., XV., p. 93, fig. 1, (in text), radula.

1929. *Vicimitra prosphora* Iredale, Proc. roy. Zool. Soc. N.S.W., p. 343, pl. 38, fig. 17.

1951. *Mitra* (*Vicimitra*) *prosphora* Laseron, Rec. Aust. Mus., XXII., No. 4, p. 341, fig. 11 (protoconch).

Size: Length 27 mm., breadth 11 mm.

Locality. 20 fathoms off Lakes Entrance (W. S. Ayres).

Observations: A solid, brown shell, sometimes with occasional splashes of white. It is apparently smooth, but under lens the whole surface shows a distinct, concentric, punctate grooving. Type locality is Twofold Bay (10 fathoms). Previously known as *Mitra solida* Reeve, 1884, under which name the radula was figured as above. It is the type of the genus *Vicimitra* Iredale which is now placed in the synonymy of *Eumitra* Tate, 1889.

Eumitra perksi (Verco, 1908).

1908. *Mitra perksi* Verco, Cat. Mar. Moll. S. Aust., p. 13.

1932. Cotton and Godfrey, S. Aust. Nat., XIII., p. 77.

1957. *Vicimitra perksi* Cotton, Trans. roy. Soc. S. Aust. (Mal. Sect.) p. 3, fig. 4,

Size of Type: 21·5 mm., breadth 8 mm.

Localities. Portland (W. H. Dillon); Port Phillip, (G. B. Pritchard).

Observations: In beach-worn specimens the shell is shining white, but in living condition invested in a yellowish-brown periostracum. Surface with extremely fine radial striae and fairly regular, concentric incised lines of tiny punctations. Columella normally with four plaits, occasionally five.

Austromitra bucklandi Sp. Nov.

Pl. Fig. 6–7.

Shell small, fusiformly-turreted, spire acuminate, whorls eight including a two-whorl protoconch, the first whorl dome-shaped. Longitudinal sculpture predominates, consisting of shining, straight, rounded ribs which fade as they approach the anterior end. The shell is further ornamented with numerous, fine microscopic spiral lirae which appear in the interstices and even cross the radial costae, and are a little narrower than the interstices, about sixteen appearing on the penultimate whorl. The colour is creamy-white with bands of light brown, and a darker brown more or less disconnected band appearing near the periphery. Aperture narrow, colour bands discernible from within; outer lip acute and finely crenulate; columella quadriplicate, the folds being conspicuously very oblique, and much lighter in colour.

Size of Holotype: Length 15·4 mm., breadth 6·5 mm., aperture 7 mm.

Localities. Dredged in Twofold Bay, New South Wales 10 fathoms (type locality) (N. Buckland), one specimen 20 fathoms off Lakes Entrance, Victoria (W. S. Ayres).

Holotype Reg. No. F.20727. Two Paratypes Reg. No. F.20728.

Observations: An elegant shell by no means rare, it is astonishing to think so conspicuous a form has escaped notice for so long. It is readily distinguished by its peculiar brown colour pattern, its shouldered whorls and uniform, shining longitudinal costae, and four columella plaits.

Named after the discoverer, Mr. N. Buckland, Eden, New South Wales.

From fifteen fathoms, 18 miles East of Lakes Entrance, Victoria (W.S. Ayres) appeared another form of this genus, narrower and much lighter in colour, with similar facies to the above, but in the opinion of the writer, not sufficiently distinct to warrant a specific name, and it is here proposed to recognize it as *Austromitra bucklandi bassiana.*

Size of Holotype. Length 13·7 mm., breadth 5·9 mm., aperture 6·1 mm.

Holotype Reg. No. F.20729. Two Paratypes Reg. No. F.20730.

HARPIDAE.

Austroharpa exquisita (Iredale, 1931).

1931. *Palamharpa exquisita* Iredale, Rec. Aust. Mus., XVIII., No. 4, p. 230 pl. 22, fig. 8.

Size of Holotype: Length 24 mm., breadth 14 mm.

Locality: Off Lake Tyers (W. S. Ayres).

Observations: Recognized by its harpiform shape and characteristic latticed ornament.

It is the sole living representative of the genus.

VOLUTIDAE.

Microvoluta australis (Angas, 1877).

1877. *Microvoluta australis* Angas, Proc. zool Soc. Lond., p. 35, pl. 5, fig. 2.
1882. Brazier, Ann. Rept. Aust. Mus., for 1881, p. 20, 21.
1882. Tryon, Manual Conch., IV., p. 105, pl. 31, figs. 151, 152.
1887. *Voluta minima* Sowerby, Thes. Conch., p. 300, pl. 515, figs. 152, 152A.
1903. *Microvoluta australis* Hedley, Mem. Aust. Mus., IV., p. 371.
1922. Peile, Proc. Malacol. Soc. Lond., XV., Pt. 1, p. 18, fig. 8 (radula).

Size: Length 10 mm., breadth 3·5 mm.

Locality. 20 fathoms off Lakes Entrance (W. S. Ayres).

Observations: The species appears all along the New South Wales coast.

Microvoluta royana (Iredale, 1924).

1924. *Microvoluta royana* Iredale Proc. Linn. Soc. N.S.W., XLIX., Pt. 3, p. 269, pl. 35, fig. 13

Size of Type: Length 9·5 mm., breadth 4 mm., length of aperture 4·5 mm.

Locality. 15 miles South-East of Lakes Entrance. 25 fathoms (W. S. Ayres).

Observations: A deeper water relation of *M. australis,* differing in the longer spire and complex sculpture.

CANCELLARIIDAE.

Microsveltia recessa (Iredale, 1925).

1925. *Microsveltia recessa* Iredale, Rec. Aust. Mus., XIV., No. 4, p. 265, pl. 43, fig. 16.
1955. Laseron, Rec. Aust. Mus., XXIII, No. 5, p. 271, fig. 11.

Size: Length 6 mm., breadth 3·5 mm.

Locality. 65 fathoms off Cape Everard (N. Buckland).

Observations: The type locality is 70 fathoms off Bateman's Bay.

MARGINELLIDAE.

Austroginella vercoi (May, 1911).

1911. *Marginella vercoi* May, Proc. roy. Soc. Tas., p. 385, pl. 13, fig. 7.
1955. Kershaw, Proc. roy. Soc. Tas., LXXXIX., p. 318 Group A.
1957. *Austroginella vercoi* Laseron, Aust. Journ. Mar. and F. Water Research, VIII., No. 3, p. 285.
1958. Macpherson, May's Ill. Index Tas. Shells, Revision, pl. 35, fig. 21.

Size: Length 5·5 mm., breadth 5 mm.

Locality. 65 fathoms off Cape Everard (N. Buckland).

Observations: A shining, pyriform, broadly-shouldered species, with the labrum faintly denticled on the inner edge. Identified by comparison with paratypes from the author. Its range of distribution is Tasmania through Bass Strait to South Australia where it was obtained originally in deep water by Verco.

Mesoginella turbinata pusilla (Laseron, 1948).

1948. *Marginella turbinata* Sowerby *pusilla* Laseron, Rec. Aust. Mus., XXII., No. 1, p. 37, pl. 5, fig. 2.

Size: Length 6·5 mm.

Localities. Off Gabo Island (T. Iredale); 20 fathoms off Lakes Entrance (W. S. Ayres).

Observations: Smaller and broader than *M. turbinata* Sowerby, 1846 with the ribbing a little more pronounced. Type locality Twofold Bay, New South Wales.

Mesoginella pattisoni (Cotton, 1944).

1944. *Marginella pattisoni* Cotton, S. Aust. Nat., XXII., No. 4, p. 11, Group B. fig. 10.

1949. Rec. S. Aust. Mus. IX., p. 203, Group B.

Size of Type: Height 9 mm., Diam. 6 mm.

Locality. 20 fathoms off Lakes Entrance (W. S. Ayres).

Observations: Type from Encounter Bay, South Australia. The Lakes Entrance specimens obtained in living condition were compared with the type of *pattisoni* in the South Australian Museum by J. H. Macpherson. They certainly represent that species though differing by having a similar cream colour as typical *turbinata;* however they differ from the latter in the stronger, more pyriform shell, with fewer and more definite plications.

Cryptospira binivitta (Laseron, 1948).

1948. *Marginella binivitta* Laseron, Rec. Aust. Mus., XXII., No. 1, p. 39, pl. 5, fig. 11.

Size of Type: Length, 6·5 mm.

Localities. 20 miles off Lakes Entrance (W. S. Ayres). 65 miles off Cape Everard (N. Buckland).

Observations: The type locality is Jervis Bay, New South Wales, (15 fathoms), taken on a pure sandy sea-bed. The colour-bands serve as a useful recognition mark.

Sinuginella pipire (Laseron, 1948).

1948. *Marginella pipire,* Laseron, Rec. Aust. Mus., XXII., No. 1, p. 38, pl. 5, fig. 8.

Size of Type: Length 3·5 mm.

Locality. 25 miles South-East of Lakes Entrance, 30 fathoms (W. S. Ayres).

Observations: A pure white species somewhat resembling *M. schoutanica* May, the distinguishing feature being its longer spire.

Longinella kemblensis, (Hedley, 1903).

1903. *Marginella kemblensis* Hedley, Mem. Aust. Mus., IV., Part 6, p. 365, fig. 88 (in text).
1921. May, Check List Moll. Tas., p. 71.
1923. May, Ill. Index Tas. Shells, pl. 31, fig. 16.
1944. Cotton, S. Aust. Nat., XXII., No. 4, p. 204, Group B. fig. 14.
1948. Laseron, Rec. Aust. Mus., XXII., No. 1, pl. 6, fig. 27.
1949. Cotton, Rec. S. Aust. Mus., IX., p. 204, pl. 20, Group C.
1955. Kershaw, Proc. roy. Soc. Tas., LXXXIX., p. 319, Group C.
1958. *Longinella kemblensis* Macpherson, May's Ill. Index Tas. Shells, Revision, pl. 31, fig. 16.

Size of Type: Length, 5·2 mm., breadth, 2 mm.

Locality. Dredged off Wilson's Promontory.

Observations: This species is white, but Cotton (loc. cit.) refers to specimens which are faintly banded with pale-brown.

Longinella everardensis Sp. Nov.

Pl. , Fig. 5

Shell white, shining, biconical, with a prominent spire; apex blunt; whorls four; aperture more than twice the length of the shell, narrow but widening at the anterior end, outer lip thickened bearing numerous, faint irregular denticles; columella fairly straight with four oblique folds.

Size of Holotype: Length 6·2 mm., breadth 3 mm.

Locality. 65 fathoms off Cape Everard (N. Buckland).

Holotype Reg. No. F.20830. Paratype Reg. No. F.20831. (fractured).

Observations: This species may possibly be confused with the Tasmanian *Marginella dentiens* May, 1911, but its more biconic shape readily separates it from that species.

Triginella malinoides Sp. Nov.

Pl. Figs. 3-4.

Shell small, strong, white, shining, subtrigonal with the apex barely visible above the rather flat summit. Aperture slightly curved almost extending as long as the shell. Outer lip arched above the summit, well developed and faintly denticled at the inner margin. Columella bearing four weak, oblique plaits.

Size: Length 3 mm., breadth 2·2 mm.

Radula (fig. 4) has a small broad centre tooth with a fine serrated cutting edge; a single pair of large lateral cusps also with a serrated cutting edge and a series of simple marginals.

Locality. 65 fathoms off Cape Everard. (N. Buckland).

Holotype. Reg. No. F.20832. Paratype F.20833.

Observations: The genus *Triginella* was erected by Laseron in 1957, Aust. Journ. Mar. and F. Water Research VIII., No. 3, p. 280 with *Marginella malina* Hedley, 1915, as type. This second representative of the genus should be readily separated by its more triangular form.

Volvarinella mayii (Tate, 1900).

1900. *Marginella mayii* Tate, Trans. roy. Soc. S. Aust., XXIV., p. 93.
1901. Tate and May, Proc. Linn. Soc. N.S.W., XXVI., p. 362, pl. 27, fig. 84.
1921. May, Check List Moll. Tas., p. 71.
1923. May, Ill. Index Tas. Shells, pl. 31, fig. 13.
1948. Laseron, Rec. Aust. Mus., XXII., No. 1, p.43, pl. 6, fig. 28.
1949. Cotton, Rec. S. Aust. Mus., p. 204, pl. 20, Group C.
1955. Kershaw, Proc. roy. Soc. Tas., LXXXIX, p. 319, Group C.
1958. *Volvarinella mayii* Macpherson, May's Ill. Index Tas. Shells, Revision, pl. 31, fig. 13.

Size of Type: Length, 12 mm., length of aperture 9 mm., breadth 6 mm.

Locality. 15 fathoms off Lakes Entrance (W. S. Ayres).

Observations: When in living condition, it is recognized by its chestnut-brown colour, with two darker-coloured bands on the body whorl and a very much lighter and narrower one at the sutures. Its range of distribution is Tasmania, New South Wales through Bass Strait to South Australia.

Volvarinella difficilis Sp. Nov.

Plate , fig. 2

Shell small, strong, shining white, biconic; apex blunt. Spire about one third the length of shell. Aperture fairly wide, slightly longer than the spire; columella barely arched, with four, erect obliquely-ascending plications, the last about the centre of the mouth; outer lip with strong external varix, slightly denticulated at the inner edge.

Size: Length 5 mm., breadth 2·5 mm.

Locality: 65 fathoms off Cape Everard Nat. Mus. (N. Buckland).

Reg. No. Holotype F.20834.

Observations: A strong, shining-white species which appears to belong in Laseron's genus *Volvarinella* (*loc. cit.*). The type of *Volvarinella* is *makiyamai* Habe, 1951.

Pillarginella Gen. Nov.

Shell medium size, elongate, subcylindrical; whorls four with a slight elevation of the spire; aperture narrow, columella bearing three, strong, oblique plaits; outer-lip moderately strong but not denticulate within.

Type species *Marginella columnaria* Hedley & May, 1908.

Pillarginella columnaria (Hedley & May, 1908).

1908. *Marginella columnaria* Hedley & May, Rec. Aust. Mus., VII., p. 120, pl. 23, fig. 19.
1908. Verco. Trans. roy. Soc. S. Aust. XXXII., p. 345.
1917. Tomlin, Proc. Malacol. Soc. Lond., XII., Pt. V., p. 259.
1921. May, Check List Moll. Tas., p. 70.
1922. Gatliff and Gabriel, Proc. roy. Soc. Vict., XXXIV., (N.S.), p. 137.
1923. May Ill. Index Tas. Shells, pl. 32, fig. 7.
1951. Macpherson and Chapple, Mem. Nat. Mus. Vict., XVII., p. 134.
1955. Kershaw, Proc. roy. Soc. Tas., LXXXIX., p. 319, Group F.
1958. *Haloginella columnaria* Macpherson, May's Ill. Index Tas. Shells, Revision, pl. 32, fig. 7.

Size: Length 7·5 mm., breadth 3·5 mm.

Locality. 25 miles South-East of Lakes Entrance, 30 fathoms (W. S. Ayres).

Observations: Type locality 100 fathoms off Cape Pillar, Tasmania, occurring also in Bass Strait through to South Australia.

TURRIDAE.

Epidirella tasmanica (May, 1911).

1911. *Hemipleurotoma tasmanica* May, Proc. roy. Soc. Tas., for 1910, p. 391, pl. 14, fig. 16.
1918. *Epideira xanthophaes* Hedley (non Watson) J. roy. Soc. N.S.W., for 1917, p. M.82.
1922. Hedley (non Watson), Rec. Aust. Mus. XIII., No. 6, p. 231.
1931. *Epidirella tasmanica* Iredale, Rec. Aust. Mus., XVIII., No. 4, p. 226.
1954. *Austrogemmula tasmanica* Laseron, Proc. roy. zool. Soc. N.S.W. p. 7, pl. 1, figs. 8, 9.
1955. *Epidirella tasmanica* Kershaw, Proc. roy. Soc. Tas., 89, p. 319.
1958. *Epiderella tasmanica* Macpherson, May's Ill. Index Tas. Shells, Revision, pl. 34, fig. 18.

Size: Length 21 mm., breadth 8 mm., length of aperture 9 mm.

Locality: 20 fathoms off Lakes Entrance (W. S. Ayres).

Observations: This is the Type species of *Epidirella* Iredale 1931.

Epidirona molleri Laseron, 1954.

1954. *Epidirona molleri* Laseron, Proc. roy. Zool. Soc. N.S.W., p. 11, pl. 2. figs. 31, 32.

Size: Length 16 mm., breadth 6·2 mm., aperture 6 mm.

Locality. 20 fathoms off Lakes Entrance (W. S. Ayres).

Observations: A shell of medium size very close to *E. carinata* Laseron, 1954, and in the absence of a long series would have been taken as a variety of that species if it had not been for the different protoconch. First recorded from Crowdy Head, N.S.W. and since taken at 60 fathoms off Eden, N.S.W.

Vexitomina garrardi Laseron, 1954.

1954. *Vexitomina garrardi* Laseron, Proc. roy. Zool. Soc. N.S.W., p. 13, pl. 2, figs. 42, 43.

Size: Length 25 mm., breadth 7·5 mm., aperture 9 mm.

Locality: 20 fathoms off Lakes Entrance (W. S. Ayres).

Mitrithara axiscalpta (Verco, 1909).

1909. *Mitromorpha alba* Petterd *axiscalpta* Verco, Proc. roy. Soc. S. Aust., XXXIII., p. 329.

1922. *Mitrithara axiscalpta* Hedley, Rec. Aust. Mus., XIII., No. 6, p. 234.

Size: Length 6 mm., breadth 3 mm.

Locality. 6 miles South of Lakes Entrance on seaweed (W. S. Ayres).

Observations: It has the shape of *M. alba* (Petterd, 1879), but has crowded axial incisions granulating the spirals. It has also three spiral rows of small, square brown spots on the body-whorl. I concur with Hedley in regarding these features as of specific distinction. Type locality, off Cape Borda, South Australia dredged in 55 fathoms.

Mitrithara macphersonae Gabriel, 1956.

1956. *Mitrithara macphersonae* Gabriel, Mem. Nat. Mus. Vict., No. 22, Part 4, p. 3.

Size of Type: Length 5·02 mm., breadth 2·75 mm.

Locality: 25 miles South East of Lakes Entrance. 30 fathoms (W. S. Ayres).

Mitrithara bassiana Gabriel, 1956.

1956. *Mitrithara bassiana* Gabriel, Mem. Nat. Mus. Vict., No. 22, Part 4, p. 4, fig. 2 (in text).

Size of Type: Length 7·75 mm., breadth 3·48 mm.

Locality: 25 miles South East of Lakes Entrance 30 fathoms (W. S. Ayres).

Etrema levicosta Laseron, 1954.

1954. *Etrema levicosta* Laseron, Proc. roy. zool. Soc. N.S.W., p. 27, pl. 6, figs. 127, 128.

Size of Type: Length 14 mm., breadth 4 mm., aperture 4·5 mm.

Locality: 20 fathoms off Lakes Entrance (W. S. Ayres).

Observations: Its nearest ally in Victoria is the common *E. denseplicata* (Dunker, 1871), from which it may be distinguished by its weaker sculpture and more attenuate form. It is recorded from 30-35 fathoms off Port Stephens and 10 fathoms off Twofold Bay, New South Wales.

Filodrillia mucronata Hedley, 1922.

1922. *Filodrillia mucronata* Hedley, Rec. Aus. Mus., XIII., No. 6, p. 222, pl. 42, fig. 8.
1954. Hedley, Proc. roy. Zool. Soc. N.S.W., p. 23, pl. 5, figs. 97-99.
Size of Type: Length 9·5 mm., breadth 3·5 mm.
Locality: 20 fathoms off Lakes Entrance (W. S. Ayres).

Observations: Its nearest ally is perhaps *F. tricarinata* (T. Woods, 1878) but its narrower protoconch and finer, more numerous spirals immediately separate it.

Paracuneus spadix tumulus Laseron, 1954.

1954. *Paracuneus spadix tumulus* Laseron, Proc. roy. Zool. Soc., N.S.W., p. 14, pl. 3, figs. 54, 55.
Size: Length 15 mm., breadth 6 mm., aperture 6 mm.
Locality: 20 fathoms off Lakes Entrance (W. S. Ayres).

Observations: Variation exists in the size of the tubercles of Victorian specimens.

Paraguraleus emina (Hedley, 1905).

1905. *Mangelia emina* Hedley, Rec. Aust. Mus., VI., p. 53, fig. 20 (in text).
1918. *Guraleus kingensis* Petterd *emina* Hedley, J. roy. Soc. N.S.W., for 1917, p. M.80.
1921. May, Check List Moll. Tas., p. 75.
1922. Rec. Aust. Mus., XIII., No. 6, p. 317, fig. 8, (in text).
1954. *Paraguraleus emina* Laseron, Proc. roy. Zool. Soc. N.S.W., p. 38, pl. 8, figs. 161, 162.
Size: Length 11 mm., breadth 4·5 mm.
Locality: 20 fathoms off Lake Entrance (W. S. Ayres).

Observations: In 1918 (loc. cit.) Hedley relegated *emina* to a variety of *G. kingensis* (Petterd, 1879), and later (1922) in his monograph included it again as a variety under the genus *Guraleus,* remarking " In this variety the shell is more fusiform, the ribs more prominent and numerous and the spirals wider spaced ". Not subscribing to the conviction that these differences are merely varietal, Laseron raises the shell to specific rank under genus *Paraguraleus* a decision with which the present writer entirely concurs. The shell occurs throughout the whole Peronian Province.

TEREBRIDAE.

Pervicacia asseela Iredale, 1924.

1924. *Pervicacia assecla* Iredale, Proc. Linn. Soc. N.S.W., Part 3, p. 263, pl. 36, fig. 16.

Size: Length 28 mm., breadth 9 mm.

Locality: Off Lakes Entrance, 20 fathoms (W. S. Ayres).

ACTEONIDAE.

Acteon retusus Verco, 1907.

1907. *Actaeon retusus Verco,* Trans. roy. Soc. S. Aust., XXXI., p. 309, pl. 29, fig. 12.
1921. *Acteon retusus* Verco, May, Check List Moll. Tas., p. 97.
1923. May, Ill. Index Tas. Shells., pl. 44, fig. 1.
1955. *Actaeon retusus* Kershaw, Proc. roy. Soc. Tas., LXXXIX., p. 321.
1958. Macpherson, May's Ill. Index Tas. Shells, Revision, pl. 44, fig. 1.

Size: Length 9·4 mm., breadth 6·1 mm.

Localities: 20 fathoms off Lakes Entrance (W. S. Ayres). 65 fathoms off Cape Everard (N. Buckland).

Pupa nivea (Angas, 1871).

1871. *Buccinulus nivea* Angas, Proc. zool Soc. Lond., p. 19, pl. 1, fig. 27.
1886. *Actaeon (Buccinulus) niveus* Watson, "Chall. Zool," XV., p. 630, No. 10.
1893. *Solidula nivea* Tryon, Manual Conch., XV., p. 146, pl. 20A., fig. 62.
1918. *Pupa nivea* Hedley, J. roy. Soc. N.S.W., LI., for 1917. p. M.96.
1936. Iredale, Rec. Aust. Mus., XIX., No. 5, p. 329.

Size: Length 12·5 mm., breadth 4·7 mm.

Locality: 20 fathoms off Lakes Entrance (W. S. Ayres).

Observations: Not uncommon on the New South Wales coast.

Pupa tragulata Iredale, 1936.

1936. *Pupa tragulata* Iredale Rec. Aust. Mus., XIX., No. 5, p. 331, pl. 24, fig. 23.

Size: Length 10 mm., breadth 5·5 mm.

Locality: 65 fathoms off Cape Everard. (N. Buckland).

Observations: Its nearest ally is perhaps *P. nivea* Angas, but is easily separated by its more squat form and like that species appears all along the continental shelf.

SCAPHANDRIDAE.

Cylichnella thetidis (Hedley, 1903).

1903. *Cylichna thetidis* Hedley, Mem. Aust. Mus., IV., p. 395, fig. 111.
1938. Cotton and Godfrey, Mal. Soc. S. Aust., S. Aust. Nat. p. 33.

Size of Type: Length 11·5 mm., breadth 4·5 mm.

Locality: 18 miles east of Lakes Entrance 20 fathoms (W. S. Ayres); Western Port (Self).

UMBRACULIDAE.

Umbraculum sinicum (Gmelin, 1791).

1791. *Patella sinica* Gmelin, Syst. Nat., p. 3705.
1791. *Patella umbellata* Gmelin, Syst. Nat., p. 3705.
1801. *Acardo umbella* Lamarck, Syst. Anim. s. Vert., p. 130.
1811. *Acardo orbicularis* Muhlfeld, Der Gesellschaft Naturforsch, V., p. 63.
1817. *Umbraculum chinense* Schumacher, Essai d'un Nouv. Syst. Vers. Test., p. 178.
1819. *Umbrella indica* Lamarck, Anim. & Vert., VI., p. 343.
1819. *Umbrella mediterranea* Lamarck, ibid., p. 343.
1825. *Gastroplax tuberculosus* Blainville, Dict., Sci. Nat., XVIII., p. 177.
1843. *Umbrella lamarckiana* Recluz, Revue Zoologique, p. 109.
1854. *Operculum pictum* A. Adams, Proc. zool. Soc. Lond., p. 137.
1856. *Umbrella ovalis* Carpenter, Proc. zool. Soc. Lond., p. 161.
1863. *Umbrella cumingi,* Deshayes, Moll. de Illes Reunion, p. 52, pl. 8, figs. 4, 5.
1867. *Operculum aurantium* Pease, Amer. J. Conch., III., p. 287.
1875. *Operculum bermudense* Morch, Malak. Blatt., XXII., p. 179.
1880. *Umbrella plicatula* Martens, Conchologische Mittherlungen, I., p. 104, pl. 20, figs. 1-3.
1923. *Umbraculum botanicum* Hedley, Proc. Linn. Soc. N.S.W., XLVIII., (3), p. 315, pl. XXXII., fig. 20.
1959. *Umbraculum sinicum* Burn, Journ. Malacol. Soc. Aust., No. 3, p. 28, text fig. a.

Size: Length 47 mm., breadth 36 mm., height 8 mm.

Localities: Off Marlo (J. Austin), 40 miles east of Lakes Entrance (E. Paddon).

Observations: The specimen from the first named locality is in excellent condition and truly represents this well known species. It is a white coloured shell, interiorly yellowish, flattish, shield-shaped, and readily identified. Burn (1959) (loc. cit.) in his " Comments on the Australian Umbraculacean Molluscs " discusses the genus with *Tylodina* and supplies a key to the families and genera, setting out the various features and I fully concur in his decision as to the above synonymy and in view of this have listed it in full above. The species has a world wide distribution, and is recorded in Australia also from New South Wales and Queensland.

PELECYPODA.

LEDIDAE.

Scaeoleda hanleyi (Angas, 1873).

1873. *Leda hanleyi* Angas, Proc. zool. Soc. Lond., p. 184, pl. 20, fig. 7.
1924. *Nuculana hanleyi* Iredale, Proc. Linn. Soc. N.S.W., XLIX., Pt. 3, p. 185.
1929. *Scaeoleda hanleyi* Iredale, Rec. Aust. Mus., XVII., No. 4, p. 158.

Size: Length 23 mm., height 13 mm., breadth 9 mm.

Locality: 20 fathoms off Lakes Entrance (W. S. Ayres).

1918. *Musculus subtortus* Hedley (non Dunker) J. roy. Soc. N.S.W., for 1917, p. M.12.
1956. *Fluviolanatus amarus* Laseron, Aust. Zool., XII., Part 3, p. 274, figs. 46-49.
Size of Type: (Fig. 46) Length 12·5 mm., depth of conjoined valves 5·5 mm.
Localities: Lake Bunga (Self); Lake Tyers (W. S. Ayres); near mouth of Betka River, Mallacoota (T. H. Sarovich and C.J.G.); near Ninety Mile Beach.

Observations: As far as the writer is aware, no record of this curious Estuarine Mussel exists in Victoria; this is hard to understand as, particularly at the last named locality, it appears in quantity on weed and so is easy of access. The shell is small, fragile, and of a yellowish colour, sometimes variegated; almost rectangular, inequivalve, the right valve slightly larger overlapping and clasping the left, this character alone providing a useful identification mark. The species occurs in New South Wales, appearing in many coastal lagoons.

MYOCHAMIDAE.

Myadora royana Iredale, 1924.

1924. *Myadora royana* Iredale Proc. Linn. Soc. N.S.W., XLIX., Pt. 3, p. 201, pl. 33, figs. 5, 6.
Size of Type: Length 17 mm., depth 9 mm.
Locality: 25 miles South East of Lakes Entrance (W. S. Ayres).

Observations: Type locality, from 50-70 fathoms off Green Cape, New South Wales.

Myadora elongata May, 1915.

1915. *Myodora elongata* May, Proc. roy Soc. Tas., p. 98, pl. 8, figs. 40, 40A.
1921. *Thraciopsis elongata* May, Check List Moll. Tas., p. 13.
1923. May, Ill. Index Tas. Shells, pl. 5, fig. 8.
1938. *Myadora elongata* Cotton and Godfrey, Fauna and Flora S. Aust., Handbook Pelecypoda, p. 141, fig. 137.
1955. *Myadora elongata* Kershaw, Proc. roy Soc. Tas., LXXXIX., p. 295.
1958. *Myadora elongata* Macpherson, May's Ill. Index Tas. Shells, Revision, pl. 5, fig. 8.
Size: Length 6 mm., depth 3·5 mm.
Locality: 25 miles South East of Lakes Entrance. 30 fathoms (W. S. Ayres).

Observations: Easily separated by its elongated form from any member of the genus in Victoria. The type locality is 40 fathoms off Thouin Bay, Tasmania and its distribution is through Bass Strait to South Australia.

CRASSATELLIDAE.

Salaputium fulvidum (Angas, 1871).

1871. *Crassatella fulvida* Angas, Proc. zool. Soc. Lond., p. 20, pl. 1, fig. 32.
1918. *Crassatellites fulvidus* Hedley, J. roy. Soc. N.S.W., LI., for 1917, p. M.16.
1921. May, Check List Moll. Tas. p. 16.

Observations: A species somewhat resembling *S. crassa* (Hinds, 1843), but smaller, less obese, and with finer sculpture. Recorded from Twofold Bay, New South Wales (10 fathoms) and Caloundra, Queensland.

GLYCYMERIDAE.

Tucetilla mayi Cotton, 1910.

1910. *Glycimeris tenuicostata* Gatliff and Gabriel, (non Reeve, 1843), Proc. roy. Soc. Vict., XXIII., (N.S.), Pt. 1, p. 97.
1921. *Glycymeris tenuicostata* May (non Reeve), Check List Moll. Tas., p. 9.
1923. May, Ill. Index Tas. Shells, pl. 2, fig. 9.
1947. *Tucetilla mayi* Cotton, Rec. S. Aust. Mus., VIII., p. 659, pl. 20, figs. 18, 19.
1951. *Glycymeris tenuicostatus* Macpherson and Chapple (non Reeve), Mem. Nat. Mus. Vict., 17, p. 144.
1958. *Glycymeris mayi* Macpherson, May's Ill. Index Tas. Shells, Revision, pl. 2, fig. 9.

Size: Height 18 mm., diameter 20 mm.

Localities: Off Wilson's Promontory (Endeavour), 50 fathoms East of Lakes Entrance (W. S. Ayres).

Observations: This, as the above synonymy indicates, appears to be a case of mistaken identification. *T. mayi* is smaller, more ovate, finer sculptured, and with the hinge teeth less well developed than the North Queensland *Glycymeris tenuicostatus* (Reeve, 1843). Type locality is off Beachport (100 fathoms), and its range of distribution is from South Australia through Bass Strait to Tasmania.

TRIGONIIDAE.

Neotrigonia gemma Iredale, 1924.

1924. *Neotrigonia gemma* Iredale Proc. Linn. Soc. N.S.W., XLIX., Part 3, p. 193, pl. 33, fig. 1, pl. 35, fig. 1.

Size: Length 14 mm., breadth 14 mm.

Locality: 40 miles East of Lakes Entrance.

Observations: This is a very small form and could easily be mistaken for the juvenile example of the common *N. margaritacea* Lamarck, 1804. Also recorded from off Green Cape 50-70 fathoms, and Twofold Bay, New South Wales.

MYTILIDAE.

Fluviolanatus amarus Laseron, 1956.

1858. *Modiola subtorta* Reeve (non Dunker) Proc. zool. Soc. Lond., 1856 (1857), p. 365; Conch. Icon., X., pl. 10, fig. 57.
1867. Angas (non Dunker), Proc. zool. Soc. Lond., p. 930.

1923. May, Ill. Index Tas. Shells, pl. 6, fig. 8.
1924. *Salaputium fulvidum* Iredale, Proc. Linn. Soc. N.S.W., XLIX Pt. 3, p. 204.
1955. Kershaw, Proc. roy. Soc. Tas., LXXXIX., p. 296.
1958. *Talabrica fulvida* Macpherson, May's Ill. Index Tas. Shells, Revision, pl. 6, fig. 8.

Size: Ant.-post. 7 mm., Umbo-Vent. 6 mm.

Locality: 18 miles East of Lakes Entrance, Victoria (W. S. Ayres).

Observations: A solid, triangularly-circular shell with strong concentric ribs. Iredale (loc. cit.), makes this the type of *Salaputium*.

CARDITIDAE.

Bathycardita raouli (Angas, 1872).

1872. *Cardita raouli* Angas, Proc. zool. Soc. Lond., p. 613, pl. 42, fig. 12.
1914. Hedley, Biol. Results "Endeavour" II., p. 73.
1918. Hedley, J. roy. Soc. N.S.W., LI., for 1917, p. M.17.
1921. *Venericardia raouli* May, Check List Moll. Tas. p. 17, No. 109.
1923. May, Ill. Index Tas. Shells, pl. 7, fig. 5.
1924. *Bathycardita raouli* Iredale, Proc. Linn. Soc. N.S.W., XLIX., pt. 3, p. 205, pl. 33, figs. 11, 12.
1955. Kershaw, Proc. roy. Soc. Tas., LXXXIX., p. 297.
1958. Macpherson, May's Ill. Index Tas. Shells, Revision, pl. 7, fig. 5.

Size: Length 23 mm., breadth 10 mm.

Locality: Off Lakes Entrance (W. S. Ayres).

Observations: This, the type of the genus is not uncommon in 50 fathoms off Eden and Green Cape, New South Wales.

TELLINIDAE.

Pseudarcopagia botanica (Hedley, 1918).

1877. *Tellina decussata* Angas (non Lamarck) Proc. zool. Soc. Lond., p. 191.
1918. *Pseudarcopagia botanica* Hedley, J. roy. Soc. N.S.W., LI., (1917), p. M.27, N.N.
1919. May, Proc. roy. Soc. Tas., p. 68.
1955. Kershaw, Proc. roy Soc. Tas., LXXXIX., p. 299.
1958. Macpherson, May's Ill. Index Tas. Shells., Revision, pl. 11, fig. 7.

Size: 35 mm.

Localities: Point Leo (Mrs. J. Kerslake); Port Albert (Self).

Observations: "Smaller but proportionately longer, more compressed and more delicately sculptured than *P. victoriae* (Gatliff and Gabriel, 1914).

TEREDIDAE.

Nausitora messeli Iredale, 1932.

1932. *Nausitora messeli* Iredale, Sydney Harbour Trust Publi. p. 37, pl. 4, figs 9-12.

Size: Shell; Height 15 mm., length 15 mm.; Pallets; Length 21 mm.; Stalk; Length 1·6 mm., breadth 1·2 mm.

Localities: Brackish water Mitchell River, Bairnsdale; Mallacoota.

Observations: In his original description the author remarks "This species is referable to the group *Nausitora* in the broad sense, but the obliquity off the pallets and the fusion of the elements deserve that it be separated sub-generically as *Inequarista.*"

Bankia gabrieli Cotton, 1934.

1934. *Bankia gabrieli* Cotton, Rec. S. Aust. Mus., V., No. 2, p. 178, figs. 5-7.

1938. Cotton and Godfrey, Fauna and Flora, S. Aust. Handbook Pelecypoda, p. 297, fig. 340, (in text).

Size of Holotype: Shell; Height 7 mm., length 8·8 mm. Pallet; Length 10·5 mm. Length of Stalk only 5 mm. Width of cone in cone section 1·9 mm. The pallets of the Holotype have a small fragment broken from each end, so that the measurements of a complete paratype pallet is given here. Paratype pallet (largest specimen); Length 20·5 mm., length of stalk only 11 mm., width of cone in cone section 2·1 mm.

Localities: Middle Brighton boat slip; Lakes Entrance.

Observations: The type locality of this species is Dennekin Slip, Port Adelaide.

PLATE.

Fig. 1. *Reticunassa compacta benthalis* sp. nov., Holotype Reg. No. F.20838, 65 fathoms off Cape Everard, Victoria.

Fig. 2. *Volvarinella difficilis* sp. nov., Holotype Reg. No. F.20834; 65 fathoms off Cape Everard, Victoria.

Fig. 3. *Triginella malinoides* sp. nov., Holotype Reg. No. F.20832; 65 fathoms off Cape Everard, Victoria.

Fig. 4. *Triginella malinoides* sp. nov. radula of Holotype.

Fig. 5. *Longinella everardensis* sp. nov., Holotype Reg. No. F.20830; 65 fathoms off Cape Everard, Victoria.

Fig. 6. *Austromitra bucklandi* sp. nov., Holotype Reg. No. F.20727; Twofold Bay, N.S.W.

Fig. 7. *Austromitra bucklandi bassiana* sp. nov., Holotype Reg. No. F.20729; 18 miles East of Lakes Entrance, Victoria.

Fig. 8. *Polinices* (*Conuber*) *ayresi* sp. nov., Holotype Reg. No. F.20828; 18 miles East of Lakes Entrance, Victoria.

Fig. 9. *Polinices* (*Conuber*) *ayresi* sp. nov., radula of Holotype.

Fig. 10. *Notomella gabensis* sp. nov., Holotype Reg. No. F.20840; 50 fathoms off Gabo Island, Victoria.

Fig. 11. *Notomella gabensis* sp. nov., profile of Holotype.

Fig. 12. *Notomella gabensis* sp. nov., radula of Holotype.

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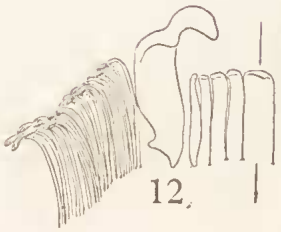

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